THE VETERINARY RECORD

A Weekly Journal for the Profession.

EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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EDITORIAL NOTES.

The failure of the National Veterinary Association to hold its Annual Meeting at Dublin in August is even more serious than was at first anticipated. There is certainly not more than one paper ready for reading, it is doubtful whether a provisional committee exists, and it is by no means clear how, in accordance with the rules, the Association, may extricate itself from the mess into which it has been allowed to fall by the neglect of its officers.

We understand that it is now proposed to call a Special General Meeting to be held in London on October 2nd. This meeting will consider the position of the Association—elect the officers and committees necessary for next year's work, and discuss any papers which may have been prepared for use at Dublin. The Association has heretofore always held a two-days annual meeting. This year we shall only have one day and probably half of that will be taken up in purely official routine business. In the best interests of the Association it is to be hoped that members will attend in force, and that they will come determined that nothing shall be allowed to injure the Society or interefere with its progress.

From two letters in our correspondence column it will be seen that the Veterinary Defence Society is likely to amend its rules in a direction many members of the profession desire. Mr. Peter Taylor tells us that the investigating committee has reported in favour of reducing the entrance fee and other reforms, and that these proposals will be discussed at a general meeting on the 24th inst. Mr. Briggs, in reference to the proposed changes, states that he shall be one of the first to join the old Society when the reforms are adopted, and he expresses an opinion that the new Society will then mutually dissolve. This is certainly good news, for a Defence Society is becoming daily more of a necessity for the profession, and *one* such body is more likely to be strong and effective than *two*. Mr. Briggs' deduction, that the pressure brought to bear by the Yorkshire Veterinary Society is chiefly the cause of the favorable changes, seems to us logical, and having obtained a victory he and his colleagues may now well join in assisting to develope and strengthen the old Society.

A correspondent points out that we made a mistake in the outline we gave of the procedure under the Pleuro-Pneumonia Act. The error was in saying that the *local veterinary inspector* would make a post-mortem, &c., whereas the words in the rules are *a veterinary surgeon*. This, of course, is a very different thing, and leaves the Board of Agriculture to make use of the local veterinary inspector, or to appoint some other practitioner, as they may deem best. We have printed the whole of the procedure rules this week, and are pleased to acknowledge our correspondent's courtesy in sending them.

The Board of Agriculture have practically tested their new powers in two outbreaks of pleuro-pneumonia—one in Surrey and one in Middlesex. Everything seems to have gone off satisfactorily.

When the stamping out of Cattle-Plague was in operation any number of "cures" were advertised, and wonderful statements were made of the success individuals had attained under conditions not quite those of scientific exactness. Now that a serious effort is to be made to clear the country of 'pleuro' we shall doubtless hear of many infallible remedies. Already some one has re-discovered paraffin oil which effected some great "cures" in 1872. That is long enough ago to make it difficult to say what disease existed and was experimented on, and it renders it quite impossible to say—if it was pleuro-pneumonia—how many of the infected animals were allowed to live and move about with latent disease in their lungs. A Veterinary Surgeon has come forward to say that he remembers the outbreak, that it was pleuro-pneumonia, and that the paraffin treatment resulted in recoveries without a single failure. ' This practitioner must surely in the eighteen years which have elapsed since this wonderful event have utilised his experience, and "cured" many more cases on his own account. We should be glad to hear of some of them, and we should like to have a full description of the method of using the paraffin. It seems to us that putting a piece of paraffin-saturated-flannel over one nostril of a cow, even if it were kept there some weeks, would not convey much active vapour to the lungs. We have never tried the experiment, but we should have supposed that paraffiin would have irritated the nasal membrane and led to some lively movements of the animal's head not conducive to retaining any flannel on the end of the nose. There are other difficulties but—is not the whole rumour a little joke ?

By an oversight we omitted in a recent number to acknowledge our indebtedness to *The Journal of Comparative Pathology* for an extract on "Retention of Fœtal Membranes."

CASES AND ARTICLES.

IMPACTION OF THE STOMACH IN A FOAL, FOLLOWED BY RUPTURE.

By C. Ward, M.R.C.V.S.

History :—The subject was a filly not quite six months old, which had been weaned more than three weeks when I first saw it, on Saturday the 6th ult.

From the day it was weaned its food consisted solely of green clover, and the owner said that he had noticed it purging soon after it was fed with the clover.

I found it standing in the middle of a loose box, with its head near the ground, perspiring freely, and 'blowing.' The pulse was very feeble, and the animal seemed very weak. There was a peculiar "pulsation" (if I may use the term) of the œsophagus, while the animal held its head low.

The owner had given it some 'black oils,' which I believe contained some turpentine, and sulphuric acid. Any other medicine that was given it was forced back through the nostrils. I was certain the animal would not live long, and in the result it died the following morning between 3 and 4 o'clock.

P.M. The stomach was an enormous size, and was as full of well-chewed clover as it could be. It was ruptured anteriorly, and there was inflammation of the large intestines.

The clover must have been the cause of the illness. The animal having been weaned too soon, its stomach did not receive the natural food, and was not able to digest the clover which had accumulated, evidently for some time. The scouring mentioned above was an effort on the part of the system to remove the foreign material, but it completely failed. If a change of food had been given, the life of the animal would possibly have been saved.

A CASE OF "MAD STAGGERS."

On Sunday night, August 31st, I was asked by a client to go out to his farm and look at a roadster horse of his, which he said was going crazy.

I hurried to his place (about three miles from my Surgery), and upon my arrival found the animal showing symptoms which justified the farmer in his diagnosis. The horse had both fore feet in the manger, and the halter shank being stretched to its full length, he was firmly fixed. We released him, and as he appeared easier we let him stand in the stall.

When examined I could find nothing abnormal about the animal; breathing, temperature, and general appearances were all right, the pulse only being accelerated.

I determined to watch him, and in about fifteen minutes he began to show signs of restlessness, and presently he commenced to plunge, run back, and make good attempts to get up to the ceiling of the stable. The farmer said the horse had been going on like this at intervals of about half an hour for two hours before he came for me. He again got both fore legs into the manger, broke the halter and finished up by getting across the partition and falling upon another horse.

I came to the conclusion that we had better get him outside until a loose box, then occupied, could be got ready.

The men questioned, said the animal had shown nothing unusual during the day; taking his food &c., without any alteration until evening.

Like many other young members in doubt, I began to think I had got some new disease to diagnose—possibly brain affection of some sort; when the farmer's son who had been away all the afternoon, came into the stable, and said the horse had previously broken out of the stable and got into some oats and vetches, and to use his expression "made a pig of himself." Upon hearing this I came to the opinion that it was through gorging the stomach that the horse was showing the symptoms—or as they said "the mad staggers."

When he was safely in the loose box I gave full dose of physic and subsequently a hypodermic injection of Morphia; leaving him for the night with a little chilled water in a bucket tied to the rack.

On my visiting the next day, the physic had operated, and the animal seemed all right, except that he was sick and refused the mash offered.

I gave a stimulant and tonic—leaving a couple of doses, since which time the animal has gone on satisfactorily.

A Young Member.

RUPTURE OF THE GASTROC-NEMEII MUSCLES.*

By S. S. Cameron, M.R.C.V.S.,
Hospital Surgeon, Melbourne Veterinary College.

Laceration and rupture of muscles in the living subject, the result of violence or accidental strain, is very rare, and the fact that so far as I am aware veterinary literature does not contain any mention of rupture of this particular set of muscles, is an inducement to place on record a case which is probably unique.

Rupture of the muscle in front of the tibia (the *flexor metatarsi*) is occasionally seen, and the symptoms are quite characteristic, viz.: a straightening of the hock, and pulling back and lifting up of the whole limb, on account of the uncounteracted action of the posterior muscles of the leg; but even these characteristics symptoms are not more so than those presented in the case under notice.

The subject was a big chestnut draught mare, seven years old, the property of a firm of iron merchants, and was brought into the College Hospital on the evening of the 11th of June last. She was, of course, dead lame, the action being similar to that of a ham-strung horse, in that when standing

* From the *Australasian Veterinary and Live Stock Journal.*

very little weight was thrown on the limb, and the hock on the injured side (in this case the near) was flexed, and "let down" three or four inches below and behind its fellow; when pushed into a walk, at each step when attempting to spring off that leg, the hock descended almost to the ground, and it was at once evident that the structures which support it were torn, and that the extensor muscles were powerless, and evidently relaxed. On manual examination, the *tendo-achilles* was found to be intact, but sligthly relaxed, and the only thing to be noticed out of the ordinary was a slight fulness at the inferior extremity of (the muscles of) the quarter (the *biceps rotator tibialis* and *triceps abductor femoris*). In addition to the above local symptoms, the animal was perspiring profusely, the breathing quickened, the pulse frequent, quick, and irritable, and every now and then the mare turned her head and looked round towards the injured limb with a depressed, irritable, and half-frightened expression of countenance.

The history of the case was *nil*. the driver of the animal persisted in saying that there had been no accident, or slipping of any sort, but simply that the mare, drawing a comparatively light load (about 10cwt.), was pulled up at a warehouse door, and was all right when he left her; but on returning, five minutes later, he found her bathed in perspiration, with the hock and limb in the position above described. He had great difficulty in getting the mare to travel.

The diagnosis was simple, viz., laceration, or complete rupture of the gastroc-nemeii muscles, and was verified on *post-mortem* examination. There being no hope whatever of recovery, it was decided to destroy the animal, but, the case being full of interest, this was postponed until the next morning, in order that a photograph might be taken, and that the students might have an opportunity of seeing the case. Fortunately, a pencil sketch was taken there and then, for in the morning the mare was found dead in the box.

FIG. 1 Showing position of the limb when the animal was standing. When moved the hock descended three or four inches (as far as the stretching of the skin would allow) below and behind the position as shown in the sketch.

Post-mortem examination revealed extensive clots of blood in the intermuscular connective tissue and under the skin, and on further dissection both *gastroc-nemeii* muscles were found to be ruptured in a jagged transversely oblique manner, about an inch from their origin on the posterior surface of the femur. They were both completely severed except for a shred of about half an inch in thickness. The popliteal artery was ruptured (but not completely severed on account of its elasticity), hence the enormous hœmorrhage. Not the least remarkable feature observable on *post-mortem* examination was the fact that the periosteum underlying the crural muscles on the *front* of the femur was stripped from the bone almost the whole length, leaving the surface of the bone bare, but slightly discoloured, on account of the resulting hœmorrhage.

FIG. 2. A sketch of the preserved dissected limb, showing the torn muscles and the stripping of the periosteum from the front of the femur.

An attempt to dissect and preserve the limb was successful, in spite of the blood clots, &c., and it now forms one of the many interesting specimens in the College Museum (see fig. 2).

Although enquiries have been made, no particulars have since been elicited from the driver as to the manner in which the injury was sustained. The cause of the lesion can, however, be safely speculated to have been either a sudden slip forward of the limb with the hock partly bent, causing an excessive strain on the muscle named (a very general occurrence on the slippery wooden block pavement in the streets of Melbourne), or a very severe effort of these muscles to extend, that is straighten, the hock in an attempt to "lift" a heavy load. In the latter case a "curb" or a sprain of the tendons would have been a more usual result, and it is this fact of the muscular tissue "giving way" before tendons or ligaments, which makes the case so interesting, and, to my mind, worthy to be placed on record.

DR. DUNCAN is said to have been the first person who was rendered insensible by chloroform.

NARCOSIS IN HORSES.*

By Professor Möller,
Imperial Veterinary College, Berlin.

For the purpose of severe operations in the surgical clinique here, horses and other large animals have frequently been narcotised. I have thereby been able anew to convince myself of the erroneousness of the very widely disseminated view, that in these animals narcosis is attended with very great danger. More than 10 years ago I pointed out this error, and called attention to the grounds upon which it rested. The observations which I have recently collected have only served to strengthen me in this opinion.

Statistical observations were made regarding the majority of the narcoses carried out. In particular, the period that elapsed before narcosis set in, and the quantity of the agent employed were determined; in the same way, the breed, age, sex, and weight of the animals were noted. So far as I know such statistics of the same extent have not hitherto been published, and I shall therefore here make known the observations that I have collected, and at the same time report the method employed in producing the narcosis.

In 126 horses (31 stallions, 38 mares and 57 geldings) which were narcotised exclusively through inhalation of chloroform, until the moment at which reflex movements (closure of the eyelids) could no longer be excited from the conjunctiva, the average quantity of chloroform required was 110 grammes (a gramme=15 grains nearly), and the time 20 minutes. For each 100 kilogrammes of body-weight about 25 grammes of chloroform were used. The narcosis thus produced lasted about 20 minutes.

Putting aside the animals between 1 and 2 years of age (which were regularly rendered insensible in 7—8 minutes, with 15—20 grammes of chloroform) the shortest space of time in horses was, in one case 8, in one other 9, and in two cases 10, minutes. (However, on a former occasion a four year old gelding was completely narcotised in 7 minutes, with 35 grammes of chloroform). In 12 of the 126 horses 30 minutes were necessary; 4, indeed, required over 30—40 minutes. In stallions narcosis set in, on an average, in 18 minutes; in mares in 19, and in geldings in 22 minutes; for this there was required in stallions, on an average, 108, in mares 104, and in geldings 118 grammes of chloroform; 7 horses (3 stallions, 2 mares, and 2 geldings) were rendered insensible with less than 50 grammes of chloroform. On the other hand 18 (5 stallions, 4 mares, 9 geldings) required 150 grammes or more of chloroform. In 1 gelding 240 grammes, and in the case of an English thorough-bred stallion 250 grammes of chloroform were administered. The average age of the narcotised stallions was 5, that of the mares 9, and that of the geldings 7 years

It may be remarked that the quantity of chloroform required depends in part upon the mode of administration. Apart from spilling and evaporation (especially in the warm outside air), less chloroform is used when it is allowed to drop slowly than when applied more quickly. The quantity of the agent therefore regularly stands in inverse proportions to the period that elapses before narcosis sets in.

The breed seems to have very slight influence on the action of chloroform; it exercises no essential influence either on the quantity of chloroform, or on the time that elapses before narcosis sets in. On the other hand, geldings require on an average more chloroform than stallions or mares.

In 28 horses ½ a gramme of morphia was subcutaneously administered half an hour before the beginning of the narcotisation. In these cases on an average 94 grammes of chloroform were used, 15½ minutes elapsed before narcosis set in.

Eight horses were narcotised with a mixture of chloroform and æther. The quantity here required averaged 210 grammes, and the period before narcosis set in was 30 minutes.

No notable difference in the action of the English and the German chloroform was observed.

One full-grown ass required in 14 minutes 40 grammes chloroform, 4 he-goats and 3 sheep, 10—23 grammes—an average of 17½ grammes of chloroform in 6 minutes.

If I add to the 162 cases of chloroform narcosis specified, those which were previously carried out by me without an accurate record, I may assert that I have induced chloroform narcosis in over 200 horses. In no case was any evil effect of the narcosis observed; there was no fatal case nor any illness whatever to be noted after it.

When morphia had been previously administered the animals sometimes shewed excitement, which was not the case when chloroform, or chloroform with æther, was exclusively used. Inasmuch as this excitement in certain operations may easily be attended with inconvenient results, and since the dose of morphia exerted only an unimportant influence on the narcosis itself—the period before the same set in not being notably shortened, and no saving in the material being perceptible—I have lately given up the use of morphia. So also was the use of the repeatedly-recommended mixture—chloroform and æther—given up, since that was attended with a waste of time and material.

In place of the sponge which was formerly used, I use a flannel cloth, 20 cm (8 inches) in length and the same breadth, which is laid over the upper nostril of cast horse. By means of a drop flask the chloroform is allowed to trickle on to the cloth at the rate of about 20 to 30 drops in 10 seconds. After an intermission of 10 seconds this is repeated, so that about 3 to 5 grammes of chloroform are used in a minute. At intervals of 2 to 3 minutes one wipes the animal's nose with a clean sponge, in order to remove any chloroform that has flowed on to the mucous membrane, so as to prevent the latter from being blistered. It is especially necessary to do this when the cloth has been completely saturated

* Translated from the Monatshefte für Praktische Thierheilkunde, by Professor McFadyean, Veterinary College, Edinburgh.

with a large quantity of chloroform. I also tried commonly-employed flannel mask, but soon returned again to the simple cloth, which has over the sponge the special advantage of not hindering to the same extent the current of air during inspiration; in using the cloth one also runs less risk of blistering the nasal mucous membrane with the chloroform. Narcosis must be avoided in animals with heart disease, and in febrile affections; an examination for such conditions before the beginning of narcotisation, I hold to be indispensable.

The operation is carried out as follows: The animal having been cast, any girth or strap on the chest is loosened, and the chest is freed from all pressure on it, in order not to interfere with respiration. During the inhalation of the medium attention is paid to the animal's breathing and pulse. At first both become accelerated, but they soon become normal again. In some horses there is a stage of excitement, but upon the whole this is rare. It is shewn by neighing and struggling with the limbs, and it seldom lasts longer than a minute. Then begins the stage of depression.

Some time after the beginning of narcotisation the majority of horses shut their eyes, and sometimes rolling movements of the eyeballs are excited (mystagmus). As sensibility and consciousness disappear most animals open their eyes again. At intervals of a minute one now tests the conjunctiva as to its reflex irritability. So long as touching the same at the inner canthus excites regular closure of the eyelids, the administration of the chloroform may be proceeded with; when this no longer takes place, the administration must be stopped.

A too frequent repetition of this experiment is to be avoided, since that weakens its action. I also find it less convenient to use the cornea as a test for the purpose, as even before narcosis has set in, many animals do not regularly re-act to stimulation at this place.

Should disturbance in the breathing set in, the administration of the medium is stopped. An irregular pulse appears to be less suspicious, but, at the same time, the administration of the chloroform must be interrupted as soon as the pulse becomes small and intermittent. In occasional cases I observed in horses general muscular tremor, and that also caused me to interrupt the inhalation. Sterterous breathing, which is so ominous in the human subject, has not nearly the same importance in the horse, but when it does occur one pulls the animal's tongue out of the mouth. Sometimes, but not always, this has the effect of stopping the sound, which, in my opinion, comes from the soft palate, that being made to vibrate by the horse's attempts to breathe through the mouth.

Should sensibility or consciousness return before the operation is finished, chloroform must be again administered according to necessity, and under observation of the above-mentioned precautions. In this way I have repeatedly kept horses from one to two hours under complete narcosis, and have never observed therefrom any bad effect. When the operation has been completed, the hobbles are immediately loosened, but the animal is allowed to lie until it stands up of itself, a quarter of an hour sometimes elapsing before this takes place. If the horse is induced to stand up before the complete return of consciousness, it walks with a swaying motion and a tendency to press forwards, similar to what is observed in animals with brain affection. To steady the gait an assistant seizes the animal's tail, and by pulling the body backwards gives support when there are any swaying movements.

When the narcosis has lasted long or been very deep, the respiration becomes interrupted during the later stages—mostly just before return of consciousness, and this symptom may well excite apprehension in those who are not acquainted with it. In horses I have repeatedly seen the respiration stopped for $\frac{1}{2}$ to $\frac{3}{4}$ of a minute (controlled by the watch). A slap with the open hand on the wall of the chest regularly and at once excites a new inspiration.

While inhalation is carried on through the uppermost nostril, the under one must remain open for the undisturbed entrance of air, and special attention must be paid to this point. In the same way care must be taken that the animal's chest is free to respire; an assistant must not be allowed to sit on it, the girth must not be tight.

By using the apparatus recently recommended by Föhringer for chloroforming horses one certainly effects a saving of chloroform, but a longer time is required to produce narcosis than by the method above described.

I cannot recommend the intra-venous employment of chloral hydrate, or the intra-rectal application of æther in order to produce narcosis. The first of these proceedings is attended with a difficulty, viz. to determine accurately the dose. This method sometimes completely fails to produce narcosis and sometimes the effect is alarming. In old horses used for experiment I saw death occur through cessation of respiration after 45 grammes of chloral hydrate. To this it must be added that wounding of the wall of the vein opposite to the point at which the needle is inserted, is attended with the danger of venous thrombosis, as I had the opportunity to convince myself. The intra-rectal application of æther, according to Cagny, produce even after a long time only incomplete narcosis. An attempt to narcotise a horse with bromide of æthyl failed, as the medium froze during the administration, and therefore could not be inhaled.

From what has been said, the use of chloroform for horses can be recommended where the production of narcosis appears necessary for carrying out severe operations or where it materially facilitates the same. It is possible that with horses as with human beings, occasional individuals may possess a special susceptibility towards the action of chloroform, rendering the use of that agent dangerous for them, but in general this danger is not nearly so great as at the present time it is frequently supposed to be.

Dr. James Matthews Duncan, the eminent physician who died suddenly from heart disease at Baden, was Sir James Simpson's assistant while pursuing researches on anæsthetics.

THE NEW CHARTER.

Probably no question before the profession is at the present moment so much thought of as this. No less than four Societies have recently expressed an opinion on it, and the time cannot be very far distant when it must be faced in earnest.

There are three chief reasons why a New Charter is necessary. 1st. To restore to the members their right to sit on the Council, and thus to make the Fellowship degree really and truly "a higher degree." 2nd. To enable the profession to appoint suitable men as Vice-Presidents. 3rd. To abolish the dual-appointment of Councilman and Examiner.

The arguments in favour of these changes have been so often set forth that there is no necessity for me to repeat them now. No serious attempt has yet been made to refute them. The profession, by a majority at every meeting, endorses the proposal made by Mr. Kidd at a Council meeting last January. It is merely the Council that blocks the way. The only means we have of knowing why the Council are obstructive is by perusing the report of the discussion on Mr. Kidd's resolution. The reasons given by each speaker are really funny. They are as follows:—

Mr. J. Roalfe Cox said—"the expense would be great—better wait a few years." This was answered by Sir Henry Simpson who said "if a charter was really wanted the College had money enough to pay for it."

Professor Brown said—"it was evident that the Council were not very enthusiastic about it and so it had better be settled at once." Not one single objection to the proposed change was offered, and no defence of existing arrangements attempted.

Mr. Greaves said—"Mr. Kidd overlooked the fact that the whole profession were advised at the time and the bulk of the opinions obtained were in favour of the Charter" (1876). This is no fact. The persons whose opinions were asked were only the principals of schools and the members of Council. If Mr. Greaves has any other information let him give chapter and verse for his assertion.

Sir Henry Simpson said—"I once moved for a New Charter to alter Clause 9, but did not succeed." Has any thing taken place since then to make the alteration Sir Henry desired less necessary now? or is the remark simply to suggest that no one else need try? He also said—"He did not think Examiners would be likely to swamp the Council, if they did it would be nearly time to legislate." Nearly! To most people it would seem a little late. At present one-third of the Council are Examiners and the time for legislation has arrived. This speaker further said—"there was an agitation to abolish the degree or neutralise it by a New Charter." The degree is supposed to be a reward for scientific attainments, and is obtained after examination on purely scientific subjects. No one proposes to alter it in any way. What is wanted is to separate from it a false and wrong privilege, and no one who values the degree properly can call this neutralising it. "Existing privileges" said Sir Henry "must be respected, and the Fellows had certain privileges which they had won by merit or selection; in any case they had *paid for them*." This sentiment might well have been uttered by a Member when protesting against being deprived of his rights by the 1876 Charter. It entirely overlooks the fact that for every Fellow who may by a new charter lose one privilege there are twenty members who lost a distinct right in 1876.

Dr. Fleming said—"that to obtain a New Charter we would have to go to Parliament." This of course is nonsense. He also stated that "the Charter (of 1876) was two years before the profession before it was obtained, but he did not remember that there was a single objection to it." I should like the dates. The first reported mention of this Charter was on October 5th, 1875, and it was obtained in August 1876. Half the profession never heard of it, and probably not ten per cent knew what its provisions were until it was signed and sealed.

Mr. Jas. Simpson agreed with Dr. Fleming that "if the privileges of the Fellows were abolished, of course the money which they had paid would have to be returned," Why? Did the Fellows take their degree as a "higher degree for the advancement of the profession" or to become eligible as Councilmen? If for the latter reason, the preamble of the 1876 Charter is a deception and a pretence. If it be honestly believed that the Fellowship selects men specially fitted for a seat on our Council then let us be logical and practical and make the examination a fair test of business capacity and the other characteristics which a Councilman should possess. To abolish the Ninth Clause is not to abolish the Fellowship—on the contrary it is to purify it. The privileges for which they paid are those for which every member also paid, and the Fellows can only ask for the return of their money when they have first repaid the members a portion of the money they expended on their diplomas. Every *elector* has a right to be *elected*.

Is it too much to ask the Council to give effect to the voice of the profession, or to give some intelligent and true reasons for their refusal?

W. H.

VETERINARY MEDICAL SOCIETIES.

EASTERN COUNTIES VETERINARY MEDICAL ASSOCIATION.

The above association held their half-yearly meeting at the Bell Hotel, Norwich, on Friday, August 29th. The President E. J. Kitchin, Esq., Norwich, in the chair. After the usual preliminary business the dates of future meetings of the Society were discussed, it was finally arranged that the second Tuesday in February and July be the ones selected.

The Secretary next read a circular from the Central Veterinary Society respecting a "Resolution on Rabies."

Each of the five clauses were discussed seriatim and unanimously adopted. The discussion on a "New Charter, is it needed?" was referred to the next meeting.

The PRESIDENT then called upon Mr Dickinson to read his paper.

COLD WATER AS A THERAPEUTIC MEASURE.

By W. DICKINSON, F.R.C.V.S., Boston.

Mr. President and Gentlemen,—The subject of my short paper is one which has given rise to great and exhaustive discussions in every branch of surgery and medicine. The practical study of the use of cold as a therapeutic measure can be arranged as follows: Its local use in surgery; its general application as a tonic; and its employment in fevers. When cold is applied continuously to any particular region it acts as a direct and powerful depressant, varying, of course, according to its intensity. It is, therefore, used locally to reduce inflammation, chiefly when the latter is of an active type. It is well to be cautious in its application for this purpose, and not to be too persistent, lest it suspend nutritive functions, and interfere with the reparative process which naturally forms a part of inflammation. As is well known excessive cold produces stasis and even gangrene, which might be the result of too energetic an employment of this agent. Locally, cold is usually applied by irrigation, sometimes by the application of pounded ice enclosed in India rubber bags. A very useful mode of employing cold to the mammary gland of cattle is by using the ice poultice made by mixing finely broken ice with fine, dry sawdust.

In combating inflammation, cold application must be continued until the desired effect is produced. Cold applied at intervals becomes a stimulant rather than a depressant; the subsequent re-action which follows the first impression being greater than its direct effect. This may be exemplified by the advantages of the cold douche as a stimulus to sluggish livers.

In pneumonia and pleurisy I have seen great benefit derived from the application of cold compresses, and have seen rapidity of respiration and pulse reduced in a short period. It is much used in croupous catarrhal pneumonia in children, especially on the Continent. Abercrombie and Niemeyer recommended the use of cold in peritonitis, but in this country there is greater favor shown to the use of warm poultices. In peritonitis in the horse I am convinced warm fomentations sometimes produce more pain, and prevent the action of medicines (anodynes) than a steady flow of cold water over the abdomen. One patient, suffering from peritonitis from a punctured wound in the groin, showed great increase of pain whilst being fomented, but after leaving him alone I was surprised to find that the pain and restlessness abated. When, for experiment however, fomentation was continued the pain and restlessness became manifest. This led to one of my first applications of cold, which was carried out from a tap in my Infirmary, and the horse was evidently relieved and expressed his gratitude as well as he could. I not only used cold to the abdomen, but directed the small hose in the wound, and from this my patient derived very great benefit. In a few hours his respiration and pulse were reduced, and his temperature lowered from 106 to 102·2. In meningitis and compression I have seen the most remarkable relief given by the application of cold, both in ice bags and by irrigation. It is well, if possible, to consider the feelings of the patient in the selection of cold or warmth. Each application at first appears to do good, but warmth cannot be so long employed as cold, because it frequently exhausts the patient, whereas cold has an exhilarating effect. Liebermeister's researches prove that a cold bath under judicious use increases the oxidation of tissue, whereby elevation of temperature of the body ensues, and from this may be seen the inadvisability of carrying either to the extreme.

Everybody who is a bather knows what a beautiful re-action follows a cold plunge, and that re-action proves its tonic effect, but if the bath be too severe, or too long, it becomes a direct depressant, debilitating and lowering the temperature of the bather. When the vital power is sufficient to re-act after the plunge, cold is not only a tonic, but a stimulent, but when it is not followed by re-action it may produce serious ill effects, partly from fatigue, and partly from excessive abstraction of heat from the body. For example take the man Dalton after his swim from France to England. The use of cold in fever was very much practiced during the last century, so cannot be looked upon as any new feature, either in medicine or surgery. The Romans constructed small aqueducts from the large rivers for the purpose of irrigating their limbs after injury, especially for flesh wounds.

Before speaking with certainty of the precedence of cold over warm it is imperative for us to consider the physiological effect of cold in inflammation and fevers. During irrigation to the body or to a limb the temperature certainly falls, although primarily there is increased animal heat. After irrigation the animal heat continues to fall and gradually regains its former point. This evidence does not show there is any tissue waste or diminished urea, or carbonic acid formation.

From statistics gathered from medical authorities in nearly 20,000 cases, including typhoid and typhus, with all forms of complications, in all ages, in all kinds of practices, including military and civil life, the average mortality was slightly over 7 per cent. In these the treatment was carried out with more or less care, whilst others who have conducted the treatment thoroughly, having confidence in it, the mortality was only a little above 3 per cent. From these statistics it is at once seen, and undoubtedly proved, that the cold water treatment is attended with a very small per centage of deaths.

Many arguments may be used both for and against the cold water treatment, especially in pneumonia, bronchial and laryngeal affections. When the fever in pneumonia is of an adynamic type it can only be put down as the result of greatly increased temperature. In very severe lung cases I have seen subsidence of fever from cold application, and, in others of equal intensity the temperature remain exactly as it was when warmth has been applied. I have never noticed any ill effects from the use of cold and can certainly say, on the other hand, that I have frequently wished I had used it in many cases where there has not been the accommodation In all laryngeal affections cold irrigation to the throat will be found to be a long way ahead of warmth, or even stimulation. In scarlatina and purpura cold effusion has a very marked effect, particularly if the throat be very painful and deglutition impaired.

In conducting this treatment certain care should be taken, which ought to be remembered, especially in the treatment of fever. You cannot give the patient cold unless the temperature of the body be reduced to nearly normal. The temperature will sometimes continue to fall after the cold bath, which is a guide not to prolong the bath. It is, therefore, most advantageous to employ it when the thermometer registers 104. A cold bath, or any other application never does good unless it removes the heat, but the cold should not be applied more severely than necessary. Perhaps it would be as well to describe how these baths are conducted, and this I will do when treating of their use in surgery.

From a surgical point of view cold plays a more important part in the treatment of injuries, solutions of continuity in soft structures, sprains and fractures, than can be said of it in medicine, at least, so far as the Veterinarian is concerned. I take it that cold is the most powerful agent in relieving and preventing inflammation we have yet discovered. It relieves pain by causing contraction of the different vessels, and limits, to a great extent, exudation, thus preventing tension and swelling. Never should the cold be so intense as to seriously lower the temperature of the injured part, or the mischief may be caused which the surgeon intended to prevent. In sprained tendons, capped hocks, badly broken knees, recent curbs, laminitis, injuries to the hock or other joints the application of cold must be continuous until the danger of inflammation is passed. If applied at intervals the hyperœmia periods, which occur between the cold applications undo whatever benefit has been derived during the time the part has been cooled. Irrigation may be continued in such cases as above mentioned for from six to eight hours where a continual stream of water can be obtained. This is not a difficult matter either from a pump or a tap. If from a pump I generally fix up a barrel and pump it full of water. I have a small India rubber or leaden pipe inserted into the bottom of the barrel, and conduct the pipe to the injured limb, and coil it round, first perforating it to the extent of eight or ten inches up the coiled end round the limb. This is very useful where it is not convenient to remove the patient. When acute inflammation has subsided, and the vessels of the part remain relaxed, cold is often a powerful agent in restoring lost tone to the parts, and for this purpose common salt and water is most beneficial.

When inflammation is well established, with swelling, heat, and pain, cold does harm, as it acts as a depressant, and diminishes the flow of blood by causing contraction of the arteries, increasing adhesion of the corpuscles, and retardation of the blood flow. Cold should never be applied when suppuration threatens.

In poll evil, where the sinus can be opened, so as to admit of a stream of cold water, I find it adds greatly to the success to irrigate in this manner two or three hours daily for a week. Afterwards the use of a mild astringent injection will often bring about a healthy action of the part, cutting short these troublesome cases, and saving a lot of time and annoyance.

Lymphangitis is one affection which is probably relieved much more quickly by irrigation for from five to six hours a day than any other malady; the pain, fever, and swelling are less by cold treatment than warm. Injuries to the legs from barbed wire do remarkably well under antiseptic irrigation, either with Jeyes' fluid or bichloride of mercury. The cases, in some instances, cause much trouble, owing to their septic tendency, which is accounted for by the possibility of inoculation from the wire. The method I adopt is by placing a piece of bichloride of mercury in the India rubber tube, and allowing a steady flow of water over it with Jeyes' preparation. I adopt the plan described by the proprietors in the sanitation of water closets, by impregnating the water with their fluid through the medium of their fluid distributor.

The numerous discussions and opinions regarding the efficacy of warm and cold applications in the treatment of laminitis have not yet led veterinarians to adopt the one or the other as a general rule. Personally I use cold in every case, and can safely say I have never seen it fail in securing what I desired. Some years ago I was attending a six-year old cart horse, suffering from laminitis. He was in a small stall, from which I had him removed to a good open shed in a field. When on his way to this more commodious apartment, he went to the pond for the purpose, I thought, of drinking, but to the surprise of all concerned, it was to cool his poor, painful feet. He walked into the pond up to his knees and hocks, and there remained for some eight or nine hours, when he was, with great difficulty and the whip, persuaded to occupy a place under cover. The pond served for this horse's foot-bath for several days. On the second day, for experiment, we placed the fore feet in warm bran poultices, and opened the door of the box, when the patient again walked, with great difficulty, to the pond. This horse made a very good recovery from his own selected treatment, and the assistance of bar shoes, &c. Since this exhibition of a patient's knowledge I have treated laminitis with cold water, instead of warm, and prefer it. Attached to my infirmary is a bath 2 ft. deep, and 14 ft. by 8 ft., which can be supplied with hot or cold water in 35 minutes. To the end of each pipe is a jointed circular pipe, perforated for irrigation of any part, or the whole, of a horse's body, so that it has, and, I hope, will afford the very best advantage for testing the use of cold and warm application.

Mr. Dickinson next exhibited a number of appliances which he used in conveying the water to different parts of the body, and minutely described his method of fixing them. The discussion that followed assumed more the form of an interrogation, each member acknowledging his experience to be very limited as regards cold water applications, but every one found the essayist most willing to answer any questions and give clinical proof of all the advantages which he claimed for the superiority of the cold over hot water as a therapeutic measure in a large majority of cases. The appreciation of Mr. Dickinson's remarks were most clearly indicated by the cordial vote of thanks proposed by Mr. Shipley, and strongly supported by all present.

R. S. Barcham, *Hon. Sec.*

EXTRACTS AND NOTES.

THE SANITARY INSTITUTE CONGRESS.

The Living Earth.—In Section 1 (sanitary science and preventive medicine)—the President (Dr. G. Vivian Poore) in his address on the Living Earth, pointed out that they had arrived of late years at a certain knowledge of the fact that the mould which formed the upper stratum of the ground they lived on was teeming with life, a fact of prime importance to sanitarians. The black vegetable mould lying on the surface of the earth was largely composed of organic matter, rich in animal and vegetable life. Saprophytes and their allies abounded everywhere; and, as the surface earth was the common reservoir of all forms of life, it followed that these low vegetable microbes were more abundant in the earth than elsewhere, and more abundant at the surface than deeper down. These micro-organisms were very active in producing changes in organic matter added to the soil, changes usually in the direction of oxidation, but occasionally of reduction. If the soil were sterilised, by heat or other means, it was no longer capable of producing any chemical change in organic matter. The vegetable living mould on the surface of the earth was, in short, a filter of the most perfect kind. Some of the bacteria in the soil might be hurtful to mankind, but, as a

general rule, the great doctrine of the survival of the fittest would hold good for them as for all other organised things. Organisms that flourished in the human body languished and ceased to multiply in the soil where conditions were unsuitable for their multiplication, or even for their survival. He was convinced that in their sanitary arrangements they had not sufficiently distinguished between the living mould and the dead earth of the subsoil. When they perforated the living humus with a pipe and took their dirty water to the subsoil. they, as it were. pricked a hole in their filter. Sanitation was purely an agricultural question, and in the country, where every cottage had, or ought to have, its patch of garden, there ought to be no difficulty in the daily removal of refuse from the house, and in applying it to agricultural purposes without any risk of contaminating the water supply. In 1848 the advice to drain was tendered with a light heart by the pioneers of modern sanitation. The Thames, the Liffey, the Clyde, the Mersey, and the Irwell were standing testimony to the failure of these great engineering schemes. and the last scheme put forward with regard to the sewage of London. to convey it all to the Essex coast and cast it into the sea, was an experiment which, like its predecessors, might be productive of unforeseen results. The panacea for all sanitary ills had been and still was "drainage," and the only scavenger in favour was water, notwithstanding the fact that sanitation by water had for its main characteristic incompleteness. Their houses were flushed, but they paid for it by fouling every natural source of pure water. He proceeded to argue in favour of keeping excremental matter out of drains. and urged that respect for the purity of water should be enforced in Board schools and Churches.

ARMY VACCINE.

The Army Vaccine Institution at Aldershot, an establishment we referred to a year ago, is apparently doing a great deal of good in an unobtrusive manner. We learn that during its first year of existence, lymph has been prepared for 42,055 people, which must represent nearly the whole of the vaccinations performed in the Army. The labour which this production entails is immense; and that the grave responsibility accepted by the Army Veterinary Department, at its own suggestion, has not been misplaced, is proved by the fact that, out of over 35,000 vaccinations performed, no untoward results have occurred. That the lymph is effective is proved by the fact that, of 11,550 vaccinations the results of which are known, only 76 children and 1,641 adults failed to take. When it is considered that many of the latter were probably previously protected, it must be acknowledged that the results are highly satisfactory, and reflect great credit on the department concerned, more especially on Professor F. Smith, of the Army Veterinary School, by whom the entire work has been initiated and carried out, and who has every reason to be satisfied with the excellent results obtained. The cost of productng the calf-lymph was less than half the amout sanctioned for its production, and about one-third of that originally paid by the authorities for a very small and irregular outside source of supply.—*Army and Navy Gazette.*

GENERAL MEDICAL COUNCIL:

REGULATIONS.

Preliminary Examination.

No person will be allowed to be registered as a medical student unless he shall have previously passed (at one or more examinations) a Preliminary Examination in: 1. English Language, including Grammar and Composition; 2. Latin, including Grammar, Translation from specified authors, and Translation of easy passages not taken from such authors; 3. Elements of Mathematics, comprising (*a*) Arithmetic—including Vulgar and Decimal Fractions; (*b*) Algebra—including Simple Equations; (*c*) Geometry—including the first book of Euclid, with easy questions on the subject matter of the same; 4. Elementary Mechanics of Solids and Fluids, comprising the Elements of Statics, Dynamics, and Hydrostatics; 5. One of the following optional subjects: (*a*) Greek; (*b*) French; (*c*) German; (*d*) Italian; (*e*) any other modern language; (*f*) Logic; (*g*) Botany; (*h*) Zoology; (*i*) Elementary Chemistry.

Preliminary Examination Modified in 1892.

On and after January 1st, 1892, the preliminary examination in general education which medical students will be required to pass before registration will comprise the following subjects:—*Compulsory Subjects;* (*a*) English Language, Grammar, and Composition, (*b*) Latin, including Grammar and Translation from specified authors and of easy passages from other authors, (*c*) Mathematics, comprising (1) Arithmetic; (2) Algebra to Simple Equations, inclusive; (3) Geometry, the subject matter of Euclid, Books I, II, III, with easy deductions. *Optional Subjects;* one of the following: Greek, French, German, Italian, any other Modern Language, Logic.

RECOMMENDATIONS

Of the General Medical Council on Professional Education and Examination.

Age for Licence to Practice, etc.

1. The age of twenty-one should be the earliest age at which a candidate should obtain a licence to practice, and the age should, in all instances, be certified.—2. The course of medical study after registration should occupy at least five years. The fifth year should be devoted to clinical work at one or more of such public hospitals or dispensaries, British or foreign, as may be recognised by any of the medical authorities mentioned in Schedule (A) of the Medical Act (1858), provided that of this year six months may be passed as a pupil to a registered practitioner holding a public appointment, or possessing such opportunities of imparting practical knowledge as shall be satisfactory to the medical authorities.

Professional Education.

3. The first four of the five years should be passed at a school or schools recognised by any of the licen-

sing bodies mentioned in Schedule (A) of the Medical Act, provided that the first year may be passed at a University or teaching institution recognised by any of the licensing bodies, where the subjects of Physics, Chemistry, and Biology are taught.—4. The following are the subjects without a sufficient knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered: (1) Chemistry, including the principles of the science, and the details which bear on the study of medicine, and the rudiments of Heat, Light, and Electricity; (2) Anatomy; (3) Physiology; (4) Materia Medica, and Pharmacy; (5) Pathology; (6) Medicine, including Medical Anatomy, Clinical Medicine, and Therapeutics; (7) Surgery, including Surgical Anatomy and Clinical Surgery; (8) Midwifery, including Diseases peculiar to Women and to Newly Born Children; (9) Theory and Practice of Vaccination; (10) Forensic Medicine; (11) Hygiene; (12) Mental Disease.

Professional Examination.

5. The Professional Examinations should be so framed as to secure that the knowledge of every practitioner whose name appears in the *Medical Register* has been tested in all the subjects of professional education which the Council deems essential (see Recommendation No. 4.).—6. There should be at least three Professional Examinations: the Examination in the Elements of Physics (including Mechanics), Chemistry, and Biology should be passed before the beginning of the second winter session.—7. The examination, and the subjects included in each, should be such, and in such order, as may ensure, as far as possible, a due continuity and sequence of study; and all examinations except the Final Examination in Medicine, Surgery, and Midwifery, should be passed before the final year intended for clinical work.—8. The Final Examination must not be passed till the termination of the fifth year of medical study.—9. The Professional Examinations should be conducted both in writing and orally; and they should be practical in all branches in which they admit of being so.—10. Two Examiners at least should take part in every oral and clinical examination.—11. A candidate should not be rejected on any written examination unless his answers have been submitted to at least two Examiners.—12. Excellence in one or two subjects should not be allowed to compensate for failure in other subjects.—13. The Professional Examinations should be held by several licensing bodies at stated periods, to be publicly notified.—14. In no case should the Examination of a candidate in any subject be conducted exclusively by his teachers in that subject in the school in which he has been educated.—15. Every candidate for the Final Professional Examination should be required to give evidence that he has had sufficient opportunities of practical study.—19. Greater attention should be given to instruction in Pathological Anatomy than is required in the curricula of some of the Examining Bodies, and, with this view, a course of not less than three months' lectures on Pathological Anatomy, with practical instruction, should be included in the curricula of all the Examining Bodies. In order to afford due time for clinical work, it is desirable that the number of systematic lectures be restricted. Extreme sub-division of examinations for admission to the *Medical Register*, by allowing candidates to present themselves for the various subjects of examination separately, is prejudicial to sound professional education, and should be discouraged.

CONTAGIOUS DISEASES (ANIMALS PLEURO-PNEUMONIA) ACT, 1890.

General Procedure under the Act.

The following is the draft of the rules of general procedure under this Act, which has been prepared by the Board of Agriculture:—

1. Upon the outbreak of disease the owner must give notice of the disease to a police constable.

2. The constable will give information to an inspector of the local authority, who thereupon will at once visit the place, and also report to the local authority.

3. If it appears to the inspector of the local authority that pleuro-pneumonia exists, or has within fifty-six days existed, he is to make and sign a declaration to that effect, and to serve notice upon the occupier, whereupon the place becomes provisionally an infected place. This carries with it an infected circle of half a mile.

4. The inspector of the local authority will then inform the local authority of his declaration and notice, and also inform the Board of Agriculture with the utmost promptitude, by telegraph if necessary.

5. Upon receipt of the intelligence the Board of Agriculture will immediately direct the slaughter of one of the diseased cattle under the supervision of a veterinary surgeon, who will arrange for the valuation, and will, after slaughter, send the lungs, securely packed, to the Royal Veterinary College, London.

6. The veterinary surgeon will, at the same time, examine all the other animals on the premises, and report as to their condition on a form which will be provided.

7. If the examination (in London) proves the test animal to have been affected, the local authority will be informed of the result of the examination, and the Board will instruct the veterinary surgeon to at once cause to be valued and slaughtered all the remaining cattle which in his opinion are diseased.

8. The Board will, as soon as possible, send a travelling inspector to the spot, and the case will thenceforth be under his charge.

9. The Board will declare a certain space surrounding the place of outbreak to be an infected place as soon as they receive from the travelling inspector a description of the boundaries for consideration of the Board.

Instructions to Travelling Inspector.

10. The travelling inspector, on his arrival at the place, will ascertain what the boundaries of the infected place should be, what cattle have been in contact with the disease or otherwise exposed to infection, and will report to the Board all the circumstances of the case. He will also place himself in communication with the local authority.

11. Thereupon the Board will send the travelling inspector instructions as to what cattle are to be slaughtered, and as to whether postponement is to be allowed in any case, and under what circumstances. Pending the reply from the Board, the travelling inspector will, where possible, make provisional arrangements for valuation and slaughter.

12. On receipt of instructions from the Board, the inspector will cause all the condemned cattle to be marked, if for immediate slaughter with a yellow tag, if for postponed slaughter with a white tag, in the left ear.

13. He will send for a valuer and cause all the cattle condemned for immediate slaughter to be valued in his presence, the valuation to be entered on a form to be signed by the valuer and the inspector.

14. The owner will be informed of the total amount of the valuation (on a form).

15. The inspector will then proceed to carry out the slaughter of all the condemned cattle.

16. If thought desirable the cattle will be moved in cattle vans to a convenient slaughter-house with a

licence of the travelling inspector, and under the supervision of a person appointed by him, who will superintend the slaughter, and report when it is completed.

17. Otherwise the cattle should be slaughtered on the premises, the necessary apparatus being supplied by the inspector.

18. If either of these courses is impracticable, the inspector must apply to the Board for instructions.

19. If postponement of slaughter is in any case sanctioned by the Board, the travelling inspector will give notice to the owner, the local authority, and the police, of the fact and of the conditions under which it is allowed.

20. The Board will provide by general order that the cattle, the slaughter of which is postponed, shall not be moved from the shed, field, or other place in which they are to be kept until slaughtered.

21. The travelling inspector will visit the place from time to time and see that none of the cattle have been moved therefrom.

22. At the expiration of the period for which the postponement of slaughter is sanctioned, the travelling inspector will have the cattle valued and then slaughtered in the same manner as the other cattle were slaughtered.

23. The carcases of slaughtered cattle must be dressed so that the lungs remain attached to the carcase by the windpipe, and the carcases must not be removed until examined by a veterinary surgeon.

24. The carcases that are considered by the veterinary surgeon to be unfit for human food will be buried or otherwise destroyed. If removed for this purpose a licence of the travelling inspector will be necessary (see Section 30 (4) of the Act of 1878 as to burial). The other carcases will be sent with the offal and hide to one of the appointed salesmen.

25. The cleansing and disinfection of the premises where animals which have been slaughtered were kept should be carried out under the direction of the travelling inspector and at the expense of the Board.

26. The inspector of the Board is to carry out the provisions of the Act with a due regard to the convenience of the owners of cattle which are liable to be slaughtered, and in any case where the owner shows good reason for the suspension of slaughter of cattle that have been in contact or exposed to infection, the inspector should communicate with the Board before taking any further action.

27. On the other hand, where an owner expresses a desire that the cattle shall be slaughtered with all despatch, the inspector is to endeavour to meet his wishes as far as possible by arranging for the slaughter and disposal of the cattle on his premises without any unnecessary delay.

28. Regulations affecting the movement of cattle will be issued by the Board from time to time as circumstances may require.

NOTE.—The method of ascertaining the value of animals for compensation is prescribed by order.

The Lancashire Veterinary Medical Association.

The next meeting of the Lancashire Veterinary Medical Association will be held on Wednesday, September 24th, 1890, at the Blackfriars Hotel, Manchester, when Dr. Fleming will read a paper on Contagious Pleuro-Pneumonia, and the New Act relating thereto, instead of Horse Pox and its relation to Cow Pox. Tea at 5. Business at 6 p.m.

PETER PIKE, *Hon. Sec.*

Superfœtation.

One of our reporters at the Dublin Horse Show writes:—"A remarkable case was brought to our notice in class for mares. Mr. James Costello, of Raheny, showed a useful mare by Herberstown out of Lizzy, by Windhound, that had twin foals, a colt and filly running with her. In the catalogue these are entered—'the colt believed to be by Brown Prince, and the filly by King of Trumps, the mare having been served by both horses in the order named.' We were informed that a period of ten days elapsed between the two services, and that a similar period elapsed between the birth of the foals. We had always been led to suppose the superfœtation was physically impossible; but here at any rate there seems to be grounds for believing that such an occurrence is possible, if infrequent. The incident is an interesting one, and we must leave it for the scientific to discuss." *Live Stock Journal.*

Monkeys and Fire.

In Stanley's recent work he speaks, on the authority of Emin Pasha, of the chimpanzees of the forest of Msangwa as using torches to give light in their nocturnal expeditions. The statement is, however, surprising and out of harmony with the anthropological definition of man, as "an animal who knows how to produce fire." A writer in the *Revue Scientifique* recalls an observation of the English traveller Battet (1589) who describes the huge monkeys inhabiting the forest of Mayom, etc., in the kingdom of Loango, as ranging themselves round the fires which have been left by the negroes, but not intelligent enough to keep them alive. Grandpré, a French naval officer, describes a tame and domesticated chimpanzee which could be relied on to keep a baker's oven going and even to call its master when it was heated sufficiently for the purposes of his trade. There is no trustworthy evidence of any tribe of men who have not possesed the art of producing fire. Is there any evidence of any monkeys who did or do possess it? If so, is it going too far to speculate at what period and under what circumstances they rose superior to the pongo (gorillas) of Loango, who highly appreciated but did not know how to make it?—*British Medical Journal.*

CORRESPONDENCE.

OUR REPRESENTATIVES.

SIR,

I read in last week's Record an interesting article on our Council and was particularly struck with a comparison of the number of Metropolitan and Provincial gentlemen upon it. If the writer is correct the metropolitan residents have a large disproportionate representation and the provinces may justly ask to have one or two additional members.

I find that next year the six retiring members are, all but one, residents in the metropolis. They are all well known men, but I venture to think two of them may well be replaced by two provincial practitioners. At present only one member of Council is resident in all the east coast counties from the Tweed south to the Thames. Cumberland, Westmoreland, Northumberland, Durham, Yorkshire, Derbyshire, Northamptonshire, Lincolnshire, Leicester, Cambridge, Hertfordshire, Norfolk, Suffolk, and Essex cover a large slice of the Kingdom, and can surely produce more than one man worthy of a seat on the Council.

I suggest that the large district I have named should adopt some combined action by the aid of their Veterinary Societies. There are the Border Counties, the North of England, the Yorkshire, the South Durham, the Lincolnshire and the Eastern Counties' Societies; in these Counties and a little co-operation would enable us to be properly represented.—Yours truly,

W. F. GREENHALGH,

Leeds, Sept., 8, 1890. *Hon. Sec., Yorks. Vet. Med. Assn.*

THE NATIONAL VETERINARY BENEVOLENT AND MUTUAL DEFENCE ASSOCIATION.

SIR,

I desire through the medium of *The Veterinary Record* to state that the committee appointed by the above Association to revise its Rules has met, and the recommendations decided upon—which are important, and partake of reform in the entrance fee and other matters—will be submitted for discussion at a General Meeting of the Association to be held on Wednesday, the 24th inst. at 3 p.m. at the Blackfriars Hotel, Manchester, immediately preceding the meeting of the Lancashire Veterinary Association, at which latter meeting Dr. Fleming will open a discussion on "Contagious Pleuro-pneumonia and the New Act relating thereto."

The members of the Benevolent and Defence Society will be duly advised by the Secretary of the date and place of meeting, and I trust there will be a good attendance.—Faithfully yours, PETER TAYLOR,

8th Sept., 1890. *President.*

"THE VETERINARY DEFENCE SOCIETY."

DEAR SIR,

I was very pleased to hear from Mr. Greaves this morning to the effect that "The Committee (of the Veterinary Defence Society) have decided, and will recommend to the ensuing General Meeting, that henceforth the entrance fee shall be 21/-, and annual subscription 10/6, and the rule of £5 deposit shall be rescinded."

Kindly compare the above with the extraordinary and elaborate article of Mr. Greaves' which have appeared in your Journal in defence of the existing administration of the Defence Society?

As President of the Yorkshire Veterinary Medical Society, and President (pro tem) of the Yorkshire and General Veterinary Defence Association, nothing could have pleased me more than the receipt of the above communication.

Mr. Greaves went very considerably out of his way in his two articles which appeared in your Journal—and which he now publishes and issues in pamphlet form—in order to defend the conduct of the office-bearers of the Defence Society. In a muddling, rambling fashion he endeavours to defend the increased entrance fee, and the payment of the £5 deposit; somewhat unhappily and erroneously anticipating the decree of the Committee appointed to revise the rules, and regulations of the Defence Society.

Why, Sir, if such modifications had been made, *or suggested*, some few months ago there would have been no steps taken in the *direction* of forming a New Society.

Until the question of reformation was initiated at the meeting of the Yorkshire Veterinary Medical Association whoever heard of any *suggested* or *proposed* alterations in the rules of the Defence Society?

If the existing Defence Society felt itself in the right—as Mr. Greaves has so weakly and vainly tried to show—why alter the rules and regulations?

Perhaps Mr. Greaves will supplement his previous communications in the way of explaining to your readers *why such suggestions for revision have been made*, and whether, or not, they were made as a sequence of the discussions which took place at the April and July meetings of the Yorkshire Veterinary Medical Association?

I venture to opine that it may be taken as a moral certainty that if the suggestions of the "Revision of Rules Committee" be adopted at the ensuing General Meeting of the Defence Society the mushroom Society will cease to exist. In fact the inception of the New Society had principally one object in view (and which it has practically attained) viz: the placing of the existing society upon an equable and fair basis. This object being practically attained I doubt not that the New Society will mutually dissolve itself next month into thin air.

As a matter of confidence, Sir, I am in a position to state, that it was never intended that the New Society should have an innings at all, but it was a generally expressed opinion that such a course of procedure (as the threatened formation of a rival society) was necessary to rectify the now admittedly wrong administration of the parent association.

However, it is an old aphorism which exclaims "all's well that ends well" and I shall be one of the foremost to offer myself as a member of the Old Society if the suggested alterations of rules are adopted.

Yours very truly, A. WILLIAM BRIGGS.

Halifax, Septr., 9, 1890.

THE PLEURO-PNEUMONIA ACT.

DEAR SIR,

On looking over *The Veterinary Record* for 30th August, I find you have made a serious mistake in describing the new procedure—you say (p. 105) "The Board of Agriculture then will direct that animal to be killed under the supervision of *the Veterinary Inspector*, who must forward the lungs to the Board."

The printed rules for procedure under the Act, issued by the Board of Agriculture (see copy enclosed) say that after the *Inspector of the* local authority has decided that pleuro exists, the Board will direct the slaughter of one of the diseased cattle under the supervision of *a Veterinary Surgeon*," note—*not the Inspector* but some other person to be appointed by the Board—who will after slaughter send the lungs to London, and at the same time examine all the other animals and report on their condition. If the examination of the lungs proves the case to be one of pleuro-pneumonia the Board will instruct *the Veterinary Surgeon* to cause to be valued and slaughtered all the remaining cattle which in *his* opinion are diseased. The Travelling Inspector then comes on the scene, takes charge of the other stock and awaits orders from the Board as to the valuing and slaughtering the stock.—Yours truly, A READER.

Mr. Dyer asks us to note a misprint in his recent letter on "The Code," (p. 104). In the last paragraph, line 17, the word efficiency should be *effeminacy*.